



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,602	08/07/2006	Yongliang Xu	4202-02100	5771
30652 7590 11/12/2009				
CONLEY ROSE, P.C. 5601 GRANITE PARKWAY, SUITE 750 PLANO, TX 75024				
EXAMINER				
ABDALLA, KHALID M				
ART UNIT		PAPER NUMBER		
2475				
MAIL DATE		DELIVERY MODE		
11/12/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/566,602

**Applicant(s)**

XU, YONGLIANG

**Examiner**

KHALID ABDALLA

**Art Unit**

2475

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/88)  
Paper No(s)/Mail Date See Continuation Sheet
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :01/31/2006 and 09/13/2007 and 08/26/2008 and 05/06/2009.

## **DETAILED ACTION**

### **Claim Objections**

Claim 1 is objected to under 37 CFR 1.75(c) because of the following informalities:  
Regarding claims 1, the phrase "...a permanent connection and a switched connection..." in line 7 seems to refer back to "... a permanent connection and a switched connection ...".in claim1, lines 1 .If this is true it's suggested to change " ... a permanent connection and a switched connection ..." to " .... the permanent connection and the switched connection ....".

### ***Claim Rejections - 35 USC § 112***

2. Claim 2-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "...the control links..." in line 3-4. There is insufficient antecedent basis for this limitation in the claim.

Regarding claims 3-5, these claims are rejected since they depend on claim2.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harney et al (US 20030175029 A1) in view of Bien et al (US 20030169729 A1).

Regarding claim 1 Harney et al disclose a method for migration between a permanent connection and a switched connection in a transmission network (method of seamless migration from a scaleable optical add/drop multiplexer to network switching node see [0001] lines 2-3) and (a method is provided for seamless migration from static to agile optical networking at a network switching node in an optical transport network see [0005] lines 1-3) the method comprising.

a) the ingress node of a current connection forwarding a message of connection migrating request node by node (On the input side of the node, a signal splitter 114 is located between the 2.times.2 switch 102 and the photonic switch 106. The signal splitter 114 receives an optical multiplexed signal from the switch 102 and splits it into two optical multiplexed signals see [0041] 1-5) and (On the output side of the node, a signal combiner 116 is located between the 2.times.2 switch 102 and the photonic switch 106. The signal combiner 116 receives an optical multiplexed signal from the 2.times.2 switch 102 and the photonic switch 106 see [0042] lines 1-6) in a direction of traffic signal transmission of the current connection starting from an ingress node until an egress node of the current connection, after receiving the message of connection migrating request; (A signal combiner 16 receives optical multiplexed signals from both the optical multiplexer 12 and the photonic switch 30. The signal combiner 16 in turn combines the two optical multiplexed signals to form a single optical multiplexed signal. The optical multiplexed signal may then be launched into a

second optical transport line 24. In this way, a seamless technique is provided for in-service migration from static optical networking to static plus agile optical networking see [0027] lines 1-9)

Harney et al does not disclose:

b) making migration between a permanent connection and a switched connection node by node after receiving the message of connection migrating request. Bienn et al from the same or similar field of endeavor teach (A telecommunications system is provided having at least a first PS network, a second PS network, a third circuit-switched core network, and a system for terminating a legacy domain circuit-switched communication upon receipt of a trigger signal request see [0006]) also see (The LMSDS 11 and LMSDS 12 also are responsible for establishment of voice bearers between MGW 7 and PSTN 44 and emulate the functionality of the HLRe's 15 and 41, respectively. If requested, the LMSDS 11 performs authentication of mobile stations, and performs call delivery to another LMSDS 12 of network 2 across reference point zz, using an open-standards PS protocol, such as SIP see [0027] lines 6-13). Thus it would have been obvious to one of ordinary skill in the art to implement the method of Bienn et al in the system of Harney et al. The method of Harney et al can be implemented on any type of method making migration between a permanent connection and a switched connection node by node after receiving the message of connection migrating request which is taught by Bienn et al with a motivation in order to provide migration between different network upon receipt of a trigger signal request.

Regarding claim2 note that Harney et al disclose the method, wherein the step of forwarding the message of connection migrating request and the step (On the input side of the node, a signal splitter 114 is located between the 2.times.2 switch 102 and the photonic switch 106. The signal splitter 114 receives an optical multiplexed signal from the switch 102 and splits it into two optical multiplexed signals see [0041] 1-5) and (On the output side of the node, a signal combiner 116 is located between the 2.times.2 switch 102 and the photonic switch 106. The signal combiner 116 receives an optical multiplexed signal from the 2.times.2 switch 102 and the photonic switch 106 see [0042] lines 1-6).

Also note that Bienn et al teach making the connection migration are performed by a control plane (An LMSDS can be generally defined as support for allowing a standardized conversion between circuit-switched data and packet-switched data for transmission on a mobile network [0014]and FIG.1) of a node and the message of connection migrating request is transferred via the control links (In step 310, the BS 49 of the Serving Network 2 returns a PS protocol message, which is a Clear Complete message per 3GPP2-3, to the Serving MSCe 45. In response, the Serving MSCe 45 releases the underlying transport connection see [0050] lines 1-5) .Thus it would have been obvious to one of ordinary skill in the art to implement the method of Bienn et al in the system of Harney et al .The method of Harney et al can be implemented on any type of method making the connection migration are performed by a control plane of a node and the message of connection migrating request is transferred via the control

links which is taught by Bienn et al with a motivation in order to provide migration between diffrenet network upon receipt of a trigger.

Regarding claim3 Bienn et al teach The method, wherein a migration from the permanent connection to the switched connection in the step of making the migration process between the permanent connection and the switched connection (A telecommunications system is provided having at least a first PS network, a second PS network, a third circuit-switched core network, and a system for terminating a legacy domain circuit- switched communication upon receipt of a trigger signal request see [0006]) also see (The LMSDS 11 and LMSDS 12 also are responsible for establishment of voice bearers between MGW 7 and PSTN 44 and emulate the functionality of the HLRe's 15 and 41, respectively. If requested, the LMSDS 11 performs authentication of mobile stations, and performs call delivery to another LMSDS 12 of network 2 across reference point zz, using an open-standards PS protocol, such as SIP see [0027] lines 6-13) comprises:

creating a state of the switched connection on the control plane of the node and handing over cross-connections of the permanent connection at the node to the control plane (The MSCe 17 uses PS signaling to control the MGW 7 across reference point 39 and to allow the MGW 7 to communicate with MGW 47 of network 2 across reference point/interface yy. The MSCe 17 translates a received E. 164 number into an IP address when IP bearer is to be used see [0029] also the LMSDS 11 performs authentication of mobile stations, and performs call delivery to another LMSDS 12 of network 2 across reference point zz, using an open-standards PS protocol, such as SIP see [0027] line 1-



13).

Regarding claim 4 note that Harney et al disclose The method, wherein a migration from the switched connection to the permanent connection in (method of seamless migration from a scaleable optical add/drop multiplexer to network switching node see [0001] lines 2-3) and (a method is provided for seamless migration from static to agile optical networking at a network switching node in an optical transport network see [0005] lines 1-3).

Also note that Bienn et al teach the step of making the migration between the permanent connection and the switched connection comprises; deleting a state of the switched connection from the control plane of the node (the serving MSCe 45 sends the serving MGW 47 a PS protocol device control format message to remove terminations see [0057]) and handing over cross-connections of the switched connection at the node to a management plane (The MSCe 17 uses PS signaling to control the MGW 7 across reference point 39 and to allow the MGW 7 to communicate with MGW 47 of network 2 across reference point/interface yy. The MSCe 17 translates a received E. 164 number into an IP address when IP bearer is to be used see [0029]). Thus it would have been obvious to one of ordinary skill in the art to implement the method of Bienn et al in the system of Harney et al .The method of Harney et al can be implemented on any type of method the step of making the migration between the permanent connection and the switched connection comprises; deleting a state of the switched connection from the control plane of the node and handing over cross-connections of the switched connection at the node to a

management plane which is taught by Bienn et al with a motivation in order to provide migration between diffrenet network upon receipt of a trigger

Regarding claim5 Bienn et al teach the method, wherein the control plane is based on TCP/IP protocol (Requests can be sent through any transport protocol, such as UDP, SCTP or TCP. SIP determines the end system to be used for the session, the communication media and media parameters, and the called party's desire to engage in the communication. Once these are assured, SIP establishes call parameters at either end of the communication, and handles call transfer see [0036] lines 8-16) , and the step of making the migration between the permanent connection and the switched connection is implemented by using the RSVP-TE signaling protocol or the CR-LDP signaling protocol (also The division of functions into separate functional entities separated by a PS protocol interface facilitates the use of open standards for managing traffic and signals in a PS environment such as Megaco, SIP, IOS, and circuit-switched signal protocols such as SS7 see [0016]). Thus it would have been obvious to one of ordinary skill in the art to implement the method of Bienn et al in the system of Harney et al .The method of Harney et al can be implemented on any type of method wherein the control plane is based on TCP/IP protocol and the step of making the migration between the permanent connection and the switched connection is implemented by using the RSVP-TE signaling protocol or the CR-LDP signaling protocol which is taught by Bienn et al with a motivation in order to provide migration between diffrenet network upon receipt of a trigger

Regarding claim 6 note that Harney et al disclose the method, wherein the migration between the permanent connection and the switched connection node by node (method of seamless migration from a scaleable optical add/drop multiplexer to network switching node see [0001] lines 2-3) and (a method is provided for seamless migration from static to agile optical networking at a network switching node in an optical transport network see [0005] lines 1-3) in the step.

in a reversed direction of a forwarding path of the message of connection migrating request after the message of connection migrating request reaches the egress node (in-service migration is enabled by a properly terminated optical splitter 14 located at the node input and a properly terminated optical combiner 16 located at the node output as shown in FIG. 1B. The optical splitter 14 receives an optical multiplexed signal from a first optical transport line 22. The optical splitter 14 in turn splits the optical multiplexed signal into two (or more) optical multiplexed signals as is well known in the art see [0024] lines 1-9).

Also note that Bienn et al teach;

b) comprises: making the migration between the permanent connection and the switched connection node by node starting from the egress node until the ingress node Bienn et al from the same or similar field of endeavor teach (A telecommunications system is provided having at least a first PS network, a second PS network, a third circuit-switched core network, and a system for terminating a legacy domain circuit-switched communication upon receipt of a trigger signal request see [0006]) also see (The LMSDS 11 and LMSDS 12 also are responsible for establishment of voice bearers

between MGW 7 and PSTN 44 and emulate the functionality of the HLRe's 15 and 41, respectively. If requested, the LMSDS 11 performs authentication of mobile stations, and performs call delivery to another LMSDS 12 of network 2 across reference point zz, using an open-standards PS protocol, such as SIP see [0027] lines 6-13)

Regarding claim7 note that Harney et al The method, further comprising: each node, after completing the migration, sending a message of migration completing notification to a next node required to make the migration until the ingress node (New agile service connections are introduced through the add/drop side of the photonic switch 30. At switching nodes with no agile add/drop service connections, the photonic switch 30 is not essential, but can still be deployed to enable more flexible network reconfiguration and restoration of agile service connections that pass through the switching node see [0028] lines 1-7) which sends the message of migration completing notification to an initiator of the connection migrating request. (A signal combiner 16 receives optical multiplexed signals from both the optical multiplexer 12 and the photonic switch 30. The signal combiner 16 in turn combines the two optical multiplexed signals to form a single optical multiplexed signal. The optical multiplexed signal may then be launched into a second optical transport line 24. In this way, a seamless technique is provided for in-service migration from static optical networking to static plus agile optical networking see [0027] lines 1-9).

Regarding claim8, note that Harney et al disclose, The method, wherein the migration between the permanent connection and the switched connection node by node (method of seamless migration from a scaleable optical add/drop multiplexer to network

switching node see [0001] lines 2-3) and (a method is provided for seamless migration from static to agile optical networking at a network switching node in an optical transport network see [0005] lines 1-3) in the step

also note that Bienn discloses teach;

b) comprises: each node making the migration between the permanent connection and the switched connection after receiving the message of migrating request (A telecommunications system is provided having at least a first PS network, a second PS network, a third circuit-switched core network, and a system for terminating a legacy domain circuit-switched communication upon receipt of a trigger signal request see [0006]) also see (The LMSDS 11 and LMSDS 12 also are responsible for establishment of voice bearers between MGW 7 and PSTN 44 and emulate the functionality of the HLRe's 15 and 41, respectively. If requested, the LMSDS 11 performs authentication of mobile stations, and performs call delivery to another LMSDS 12 of network 2 across reference point zz, using an open-standards PS protocol, such as SIP see [0027] lines 6-13). Thus it would have been obvious to one of ordinary skill in the art to implement the method of Bienn et al in the system of Harney et al .The method of Harney et al can be implemented on any type of method each node making the migration between the permanent connection and the switched connection after receiving the message of migrating request which is taught by Bienn et al with a motivation in order to provide migration between diffrenet network upon receipt of a trigger signal request.

Regarding claim9, note that Harney et al disclose The method, further comprising: after all nodes complete the migration, forwarding the message of migration completing notification node by node starting from the egress node till the ingress node (New agile service connections are introduced through the add/drop side of the photonic switch 30. At switching nodes with no agile add/drop service connections, the photonic switch 30 is not essential, but can still be deployed to enable more flexible network reconfiguration and restoration of agile service connections that pass through the switching node see [0028] lines 1-7) in the reversed direction of the forwarding path of the message of request, and the ingress node sending the message of migration completing notification to an initiator of the connection migrating request (in-service migration is enabled by a properly terminated optical splitter 14 located at the node input and a properly terminated optical combiner 16 located at the node output as shown in FIG. 1B. The optical splitter 14 receives an optical multiplexed signal from a first optical transport line 22. The optical splitter 14 in turn splits the optical multiplexed signal into two (or more) optical multiplexed signals as is well known in the art see [0024] lines 1-9).

Regarding claim10, note that Harney et al disclose The method, wherein the message of migration completing notification comprises routing information of an entire connecting link of the migration (New agile service connections are introduced through the add/drop side of the photonic switch 30. At switching nodes with no agile add/drop service connections, the photonic switch 30 is not essential, but can still be deployed to enable more flexible network reconfiguration and restoration of agile service connections that pass through the switching node see [0028] lines 1-7).

Regarding claim 11, note that Harney et al disclose the method , wherein the message of migration completing notification (New agile service connections are introduced through the add/drop side of the photonic switch 30. At switching nodes with no agile add/drop service connections, the photonic switch 30 is not essential, but can still be deployed to enable more flexible network reconfiguration and restoration of agile service connections that pass through the switching node see [0028] lines 1-7)

Also note that Bienn et al teach comprises an identifier of a current switched connection if the migration between the permanent connection and the switched connection is a migration from the switched connection to the permanent connection (A reference point exists when two network entities are interconnected through one signaling or bearer stream point. Reference points identify that a logical relationship exists between two network entities see [0025] lines 6-10). Thus it would have been obvious to one of ordinary skill in the art to implement the method of Bienn et al in the system of Harney et al .The method of Harney et al can be implemented on any type of method an identifier of a current switched connection if the migration between the permanent connection and the switched connection is a migration from the switched connection to the permanent connection which is taught by Bienn et al with a motivation in order to provide migration between different network upon receipt of a trigger signal request.

5. Claims 12-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harney et al (US 20030175029 A1) in view of Picard et al (US 20040146147 A1).

Regarding claim 12 Harney et al disclose The method, wherein the message of connection migrating request received by the ingress node comprises (On the input side of the node, a signal splitter 114 is located between the 2.times.2 switch 102 and the photonic switch 106. The signal splitter 114 receives an optical multiplexed signal from the switch 102 and splits it into two optical multiplexed signals see [0041] 1-5) and (On the output side of the node, a signal combiner 116 is located between the 2.times.2 switch 102 and the photonic switch 106. The signal combiner 116 receives an optical



multiplexed signal from the 2.times.2 switch 102 and the photonic switch 106 see [0042] lines 1-6).

Harney et al does disclose an ingress node identifier and incoming port information of the ingress node of the connection currently requested to be migrated, or the ingress node identifier and outgoing port information of the ingress node of the connection currently requested to be migrated, and each node adds its own outgoing port information to the message of connection migrating request before forwarding the message. Picard et al from the same or similar endeavor teach an ingress node identifier and incoming port information of the ingress node of the connection currently requested to be migrated, or the ingress node identifier (A typical migration starts with the sending of a migration request identifying a subscriber from the host 36 to the server 38. The server 38 seizes a line to the switch 34 and the host 36 controls the switch 34 to provide a voice connection between the server 38 and the source 30. The server 38 accesses the subscriber's mailbox on the source 30 through the switch 34 and records the messages stored in the mailbox along with message attribute information, such as the time of the message, etc. Once the recording is complete, the recorded messages, etc. are sent by the server 38 to the destination system 32 over a local area network (LAN) connecting the components see [0026] lines 5-14)

and outgoing port information of the ingress node of the connection currently requested to be migrated, and each node adds its own outgoing port information to the message of connection migrating request before forwarding the message (The platform 10 typically sends and receives voice signals over a voice data communication connection 14, such

as a T1 data line, having a multi-line hunt group (MLHG). The multi-line group allows the platform 10 to interact with multiple callers simultaneously whether they are subscribers retrieving messages left by callers or callers leaving messages for subscribers. The platform also communicates over a simplified message desk interface (SMDI) signaling connection 16 to receive automatic number identification (ANI) data identifying the caller and to send message waiting indicator (MWI) data to the public switched telephone network (PSTN) 12 see [0025] lines 7-14). Thus it would have been obvious to one of ordinary skill in the art to implement the method of Picard et al in the system of Harney et al .The method of Harney et al can be implemented on any type of method an ingress node identifier and incoming port information of the ingress node of the connection currently requested to be migrated, or the ingress node identifier and outgoing port information of the ingress node of the connection currently requested to be migrated, and each node adds its own outgoing port information to the message of connection migrating request before forwarding the message which is taught by Picard et al with a motivation in order to provide route and merge message waiting indication to the appropriate systems during migration.

Regarding claim13 Picard et al teach The method, wherein, in the step of forwarding the message of connection migrating request by each node, the outgoing port information from a present node to a next node (The platform 10 typically sends and receives voice signals over a voice data communication connection 14, such as a T1 data line, having a multi-line hunt group (MLHG). The multi-line group allows the platform 10 to interact with multiple callers simultaneously whether they are subscribers

retrieving messages left by callers or callers leaving messages for subscribers. The platform also communicates over a simplified message desk interface (SMDI) signaling connection 16 to receive automatic number identification (ANI) data identifying the caller and to send message waiting indicator (MWI) data to the public switched telephone network (PSTN) 12 see [0025 ] lines 7-14) is added to the message of connection migrating request if the message includes the incoming port information; and the incoming port information from the present node to the next node is added to the message of connection migrating request if the message includes the outgoing port information (The host computer 36 issues requests to the subscriber migration server 38 to migrate individual subscribers and/or messages from the source system 30 to the destination system 32. The host computer 36 also preferably maintains the SMDI connections to the PSTN 12, the source system 30, and the destination system 32. The host computer 36 acts as an SMDI router in deciding which SMDI call arrival packets from the PSTN are directed to which system based on the status of the mailboxes in the migration database 40 see [003] lines 5-12). Thus it would have been obvious to one of ordinary skill in the art to implement the method of Picard et al in the system of Harney et al .The method of Harney et al can be implemented on any type of method wherein, in the step of forwarding the message of connection migrating request by each node, the outgoing port information from a present node to a next node is added to the message of connection migrating request if the message includes the incoming port information; and the incoming port information from the present node to the next node is added to the message of connection migrating request if the message includes the

outgoing port information which is taught by Picard et al with a motivation in order to provide route and merge message waiting indication to the appropriate systems during migration.

Regarding claim 14 note that Harney et al disclose The method, wherein the incoming port information comprises an identifier of the incoming port, or an identifier of the incoming channel (there is no possibility of interference between static and agile connections and any noise in unused static channels is prevented from combining with corresponding agile connections at the signal combiner 116. Lastly, note again that static pass-through connections being routed through the photonic switch enables recovery of stranded waveband bandwidth, and recovery of guard bands between adjacent wavebands. The static add and drop wavelengths or wavebands are still maintained see [0046]) or the combination thereof; and the outgoing port information comprises an identifier of the outgoing port, or an identifier of the outgoing channel, or the combination thereof (whereas the other optical multiplexed signal is routed back through the 2.times.2 switch 102. The photonic switch 106 can switch the agile data signals, thereby enabling agile optical networking. The 2.times.2 switch 102 also provides a return path for the static signal channels to the fixed optical add/drop multiplexer 104 see [0041]).

Regarding claim 15 note that Harney et al disclose The method, wherein the outgoing port information of the node is obtained by inquiring cross-connection information stored in the node itself based on the incoming port information of the current node (In-service migration is enabled by a properly terminated optical splitter 14 located at the node

input and a properly terminated optical combiner 16 located at the node output as shown in FIG. 1B. The optical splitter 14 receives an optical multiplexed signal from a first optical transport line 22 see [0024] lines 1-9).

Regarding claim 16 note that Harney et al disclose The method, further comprising before the ingress node makes the migration between the permanent connection and the switched connection (method of seamless migration from a scaleable optical add/drop multiplexer to network switching node see [0001] lines 2-3) and (a method is provided for seamless migration from static to agile optical networking at a network switching node in an optical transport network see [0005] lines 1-3) .

Also note that Picard et al teach deciding whether the ingress node identifier and incoming port information or the ingress node identifier and outgoing port information (A typical migration starts with the sending of a migration request identifying a subscriber from the host 36 to the server 38. The server 38 seizes a line to the switch 34 and the host 36 controls the switch 34 to provide a voice connection between the server 38 and the source 30. The server 38 accesses the subscriber's mailbox on the source 30 through the switch 34 and records the messages stored in the mailbox along with message attribute information, such as the time of the message, etc. Once the recording is complete, the recorded messages, etc. are sent by the server 38 to the destination system 32 over a local area network (LAN) connecting the components see [0026] lines 5-14),

contained in the received message of connection migrating request is correct or not, if yes, making the migration, otherwise returning a message of failure (the HC 36 will

reattempt this subscriber number (SN) once the subscriber logs in again via the SS 30 and the PIN is again collected. If neither prompt is recognized 220, then the SMS 38 returns 222 a failure indication to the HC 36, which will note the failure, requests 224 scheduling of a retry and reattempt of the migration for this subscriber after an appropriate waiting period has elapsed and disconnects 226 see [0059]. Thus it would have been obvious to one of ordinary skill in the art to implement the method of Picard et al in the system of Harney et al. The method of Harney et al can be implemented on any type of method deciding whether the ingress node identifier and incoming port information or the ingress node identifier and outgoing port information contained in the received message of connection migrating request is correct or not, if yes, making the migration, otherwise returning a message of failure which is taught by Picard et al with a motivation in order to provide route and merge message waiting indication to the appropriate systems during migration.

Regarding claim 17 note that Harney et al disclose the method, wherein the message of connection migrating request received by the ingress node (On the input side of the node, a signal splitter 114 is located between the 2.times.2 switch 102 and the photonic switch 106. The signal splitter 114 receives an optical multiplexed signal from the switch 102 and splits it into two optical multiplexed signals see [0041] 1-5) and (On the output side of the node, a signal combiner 116 is located between the 2.times.2 switch 102 and the photonic switch 106. The signal combiner 116 receives an optical multiplexed signal from the 2.times.2 switch 102 and the photonic switch 106 see [0042] lines 1-6).

Also note that Picard et al teach further comprises: an egress node identifier, or the egress node identifier and outgoing port information at the egress node of the current connection requested to be migrated (a migration request identifying a subscriber from the host 36 to the server 38. The server 38 seizes a line to the switch 34 and the host 36 controls the switch 34 to provide a voice connection between the server 38 and the source 30 see [0026] lines 5-9). Thus it would have been obvious to one of ordinary skill in the art to implement the method of Picard et al in the system of Harney et al .The method of Harney et al can be implemented on any type of method an egress node identifier, or the egress node identifier and outgoing port information at the egress node of the current connection requested to be migrated which is taught by Picard et al with a motivation in order to provide route and merge message waiting indication to the appropriate systems during migration.

Regarding claim18 note that Harney et al disclose The method, further comprising before the egress node makes the migration between the permanent connection and the switched connection(method of seamless migration from a scaleable optical add/drop multiplexer to network switching node see [0001] lines 2-3)and (a method is provided for seamless migration from static to agile optical networking at a network switching node in an optical transport network see [0005] lines 1-3) .

Also note that Picard et al teach deciding whether the egress node identifier or the egress node identifier and outgoing port information (A typical migration starts with the sending of a migration request identifying a subscriber from the host 36 to the server 38. The server 38 seizes a line to the switch 34 and the host 36 controls the switch 34 to

provide a voice connection between the server 38 and the source 30. The server 38 accesses the subscriber's mailbox on the source 30 through the switch 34 and records the messages stored in the mailbox along with message attribute information, such as the time of the message, etc. Once the recording is complete, the recorded messages, etc. are sent by the server 38 to the destination system 32 over a local area network (LAN) connecting the components see [0026] lines 5-14)

contained in the received message of connection migrating request is correct or not, if yes, creating or deleting the switched connection at the node, otherwise returning a message of failure (the HC 36 will reattempt this subscriber number (SN) once the subscriber logs in again via the SS 30 and the PIN is again collected. If neither prompt is recognized 220, then the SMS 38 returns 222 a failure indication to the HC 36, which will note the failure, requests 224 scheduling of a retry and reattempt of the migration for this subscriber after an appropriate waiting period has elapsed and disconnects 226 see [0059]) Thus it would have been obvious to one of ordinary skill in the art to implement the method of Picard et al in the system of Harney et al .The method of Harney et al can be implemented on any type of method deciding whether the egress node identifier or the egress node identifier and outgoing port information contained in the received message of connection migrating request is correct or not, if yes, creating or deleting the switched connection at the node, otherwise returning a message of failure which is taught by Picard et al with a motivation in order to provide route and merge message waiting indication to the appropriate systems during migration.



Regarding claim 19 Bienn teach the method, wherein, if the migration between the permanent connection and the switched connection is a migration from the switched connection to the permanent connection (A telecommunications system is provided having at least a first PS network, a second PS network, a third circuit-switched core network, and a system for terminating a legacy domain circuit-switched communication upon receipt of a trigger signal request see [0006]) also see (The LMSDS 11 and LMSDS 12 also are responsible for establishment of voice bearers between MGW 7 and PSTN 44 and emulate the functionality of the HLRe's 15 and 41, respectively. If requested, the LMSDS 11 performs authentication of mobile stations, and performs call delivery to another LMSDS 12 of network 2 across reference point zz, using an open-standards PS protocol, such as SIP see [0027] lines 6-13), the message of connection migrating request received by the ingress node comprises: an identifier (A reference point exists when two network entities are interconnected through one signaling or bearer stream point. Reference points identify that a logical relationship exists between two network entities sees [0025] lines 6-10). of a current switched connection. Thus it would have been obvious to one of ordinary skill in the art to implement the method of Bienn et al in the system of Harney et al .The method of Harney et al can be implemented on any type of method wherein, if the migration between the permanent connection and the switched connection is a migration from the switched connection to the permanent connection the message of connection migrating request received by the ingress node comprises: an identifier of a current switched connection which is taught by Bienn et al with a motivation in order to provide migration between different network

upon receipt of a trigger signal request.

Regarding claim20, Bienn teach the method, wherein the connection is a uni-directional connection or a bi-directional connection (The HLRe 15 is a network entity that supports non-PS Terminals (legacy MS's) in a PS network. The HLRe 15 can have a PS signaling interface. The HLRe 15 supports roaming to the other PS networks see [0030] and FIG.1). Thus it would have been obvious to one of ordinary skill in the art to implement the method of Bienn et al in the system of Harney et al .The method of Harney et al can be implemented on any type of method wherein the connection is a uni-directional connection or a bi-directional connection which is taught by Bienn et al with a motivation in order to provide migration between diffrenet network upon receipt of a trigger signal request.

Regarding claim21 note that, Bienn teach the method , wherein the switched connection is a soft permanent connection initiated by network management system or a switched connection initiated by a client device or a proxy thereof (call initiation, call termination, in a PS signaling network environment will operate in a manner transparent to the user. Furthermore, ideally, such support should also permit supporting new features and capabilities see [0004]) also (The LMSDS systems 11 and 12 are responsible for the control of call origination and call termination of both the circuit and packet switched networks. The LMSDS 11 and 12 terminate the user-network signaling and convert it into the appropriate network-network signaling see [0028] lines 4-8). Thus it would have been obvious to one of ordinary skill in the art to implement the method of Bienn et al in the system of Harney et al .The method of Harney et al can be

implemented on any type of method wherein the switched connection is a soft permanent connection initiated by network management system or a switched connection initiated by a client device or a proxy thereof which is taught by Bienn et al with a motivation in order to provide migration between diffrenet network upon receipt of a trigger signal request.

Regarding claim22 note that Harney et al disclose The method, wherein the transmission network is a Synchronous Digital Hierarchy, or a synchronous optical network, or a wavelength switched network, or an Optical Transport Network (OTN).( numerous optical data signals are multiplexed together to form a single optical system signal. The optical system signal may be constituted in an optical line hierarchy as is known in the art. For example, the optical system signal may be constructed from a plurality of optical band signals, where each of the optical band signals is constructed from a plurality of optical waveband signals and each of the optical waveband signals are constructed from a plurality of optical wavelength signals. Although the fixed optical add/drop multiplexer 12 preferably operates to add, drop, manually route, or otherwise manipulate optical wavelength signals, it is readily understood that the multiplexer may support optical data signals at any one of the hierarchical layers that form an optical system signal. Optical band signals and optical waveband signals are herein referred to as optical multiplexed signals see [0023] lines 1-9).

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(US 20070291654 A1), (Shobatake) discloses, ATM communication system process migration method in the ATM communication system, and handover processing method.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHALID ABDALLA whose telephone number is (571)270-7526. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dang Ton can be reached on 571-272-3171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DANG T TON/

Supervisory Patent Examiner, Art Unit 2475/D. T. T./

Application/Control Number: 10/566,602

Page 27

Art Unit: 2475

Supervisory Patent Examiner, Art Unit 2475